

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEET

*David T. Adams*  
REGISTERED CIVIL ENGINEER

October 20, 2006  
PLANS APPROVAL DATE

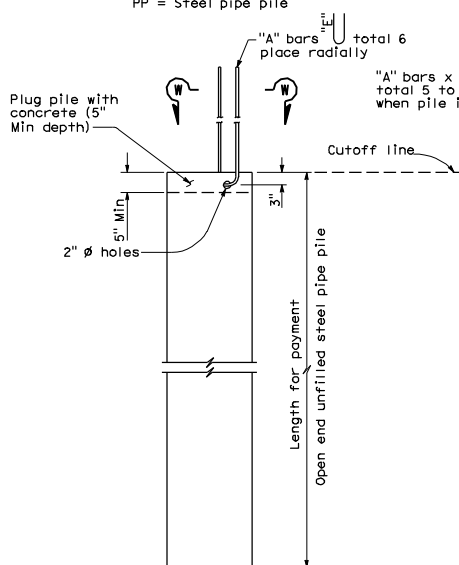
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REGISTERED PROFESSIONAL ENGINEER  
Daniel T. Adams  
No. C46476  
EXP. 03-30-07  
CIVIL  
STATE OF CALIFORNIA

To get to the Caltrans web site go to <http://www.dot.ca.gov>

	Nominal Resistance (Tension) *	
	Not Required	Required
"A" bars	#6	#8
"E" Dimension	2'-0"	2'-10"

\* See Pile Data Table in the Project Plans for Nominal Resistance (Tension) Requirements



The image contains two technical drawings of precast prestressed concrete piles, labeled (A) and (B). Both drawings show a vertical cross-section of the pile with various dimensions and components.

**Diagram (A):**

- Top Section:** Shows a section of the pile with a length of 23'-0" and a diameter of 24" (indicated by a circle with a cross). It includes a note: "23'-0" in place cast".
- Reinforcement:** The pile is reinforced with "A" bars (total 5) and 2W8.0 bundled bars (pitch of spiral 2 1/2").
- Dimensions:** The total length of the pile is 20'-0". The length for payment is 20'-0". The diameter is 24". The pitch of the spiral is 2 1/2".
- Labels:** "A" bars x 23'-0" total 5 to be in place when pile is cast. Pitch of spiral W8.0 wire. 20'-0" Length for payment. Precast prestressed concrete pile.

**Diagram (B):**

- Top Section:** Shows a section of the pile with a length of 23'-0" and a diameter of 24" (indicated by a circle with a cross). It includes a note: "23'-0" in place cast".
- Reinforcement:** The pile is reinforced with "A" bars (total 5) and 2W8.0 bundled bars (pitch of spiral 2 1/2").
- Dimensions:** The total length of the pile is 20'-0". The length for payment is 20'-0". The diameter is 24". The pitch of the spiral is 2 1/2".
- Labels:** "A" bars x 23'-0" total 5 to be in place when pile is cast. Pitch of spiral W8.0 wire. 20'-0" Length for payment. Precast prestressed concrete pile.

**Additional Notes:**

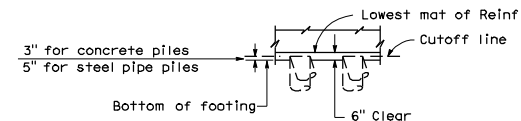
- Octagonal or circular section optional.

\*\* W11.0 @ 1 3/4" may be substituted

### ALTERNATIVE "X"

\*\* W11.0 @ 1 $\frac{3}{4}$ " may be substituted

### ALTERNATIVE "Y"



PILE EMBEDMENT

DESIGN NOTES:

DESIGN CAPACITY :

Compression = 200 kip (Service state)  
= 400 kip (Nominal axial strength)  
Tension = 80 kip (Service state)  
= 200 kip (Nominal axial strength)

REINFORCED CONCRETE

$$\begin{aligned} f'_c &= 4,000 \text{ psi} \\ f_y &= 60,000 \text{ psi} \end{aligned}$$

PRECAST PRESTRESSED PILES

$P_f$  = Prestress Force (After losses)  
Concrete Strength  $f'_c$  @ 28 days = 7,000 psi  
 $f'_c$  @ transfer = 4,000 psi

STEEL PIPE PILE

F<sub>y</sub> (minimum yield strength) = 45,000 psi  
F<sub>u</sub> (minimum tensile strength) = 66,000 psi

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

### PILE DETAILS CLASS 200

NO SCALE

RSP B2-8 DATED OCTOBER 20, 2006 SUPERSEDES STANDARD PLAN B2-8  
DATED MAY 1, 2006-PAGE 242 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REvised STANDARD PLAN RSP B2-8